

CLAIMS

1. Mixtures of acrylic or methacrylic compounds containing 1 to 35% by weight epoxy (meth)acrylates, based on the total quantity of acrylic or methacrylic compounds, the mixture being obtainable by a process comprising the following steps to be carried out consecutively: a) esterifying hydroxyl compounds (I) with acrylic acid and/or methacrylic acid, b) optionally adding more acrylic acid and/or methacrylic acid and c) reacting the excess acrylic acid and/or methacrylic acid with epoxides in the presence of the esterification product from step a).
- 10 2. Mixtures as claimed in claim 1, characterized in that reaction products of polyols with α,ω -dicarboxylic acids are used as the hydroxyl compounds in step a).
- 15 3. Mixtures as claimed in claim 1, characterized in that reaction products of addition products of 1 to 10 mol ethylene oxide onto glycerol and/or trimethylol propane with α,ω -dicarboxylic acids are used as the hydroxyl compounds in step a).
- 20 4. Mixtures as claimed in claim 1, characterized in that reaction products of addition products of 1 to 10 mol ethylene oxide onto glycerol and/or trimethylol propane with adipic acid are used as the hydroxyl compounds in step a).
- 25 5. A process for the production of mixtures of acrylic or methacrylic compounds containing 1 to 35% by weight epoxy (meth)acrylates, based on the total quantity of acrylic or methacrylic compounds, the mixture being obtainable by carrying out the following steps consecutively: a) esterifying hydroxyl compounds (I) with acrylic acid and/or methacrylic acid, b) optionally adding more acrylic acid and/or methacrylic acid and c) reacting the excess acrylic acid and/or methacrylic acid with epoxides in the presence of the esterification product from step a).
- 30 6. The use of the mixtures claimed in claims 1 to 4 as radiation-curable compositions for coating systems, such as paints, coating compositions

and the like.

7. The use of compositions of the mixtures claimed in claims 1 to 4 and 0.01 to 20% by weight, based on the mixtures as a whole, of one or more dimerdiol (meth)acrylates with a degree of esterification of at least 50% as radiation-curable compositions for coating systems, such as paints, coating compositions and the like.
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